

Science Content Standards: Grade Three

Physical Sciences

1.0 God has set up physical laws which govern our universe. Energy and matter have multiple forms and can be changed from one form to another. As a basis for understanding this concept:

- 1.a *Students know* that God has set up physical laws which govern our universe.
- 1.b *Students know* energy comes from the Sun to Earth in the form of light.
- 1.c *Students know* sources of stored energy take many forms, such as food, fuel, and batteries.
- 1.d *Students know* machines and living things convert stored energy to motion and heat.
- 1.e *Students know* energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects.
- 1.f *Students apply* an understanding of the motion of objects.
- 1.g *Students predict* change caused by a change in temperature.
- 1.h *Students know* matter has three forms: solid, liquid, and gas.
- 1.i *Students know* evaporation and melting are changes that occur when the objects are heated.

Life Sciences

2.0 God gives organisms special adaptations in physical structure or behavior which allow for survival. As a basis for understanding this concept:

- 2.a *Students identify and classify* animal groups and types according to their characteristics and habitats.
- 2.b *Students know* plants and animals have structures that serve different functions in growth, survival, and reproduction.
- 2.c *Students know* examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.
- 2.d *Students know* living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.
- 2.e *Students know* when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.
- 2.f *Students know* that some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today.

Earth Sciences

3.0 In God's orderly universe, objects in the sky move in regular and predictable patterns. As a basis for understanding this concept:

- 3.a *Students know* that God placed the sun and planet in location to support life.
- 3.b *Students know* the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons.
- 3.c *Students know* the way in which the Moon's appearance changes during the four week lunar cycle.
- 3.d *Students know* telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye.
- 3.e *Students know* that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth.
- 3.f *Students know* the position of the Sun in the sky changes during the course of the day and from season to season.

Investigation and Experimentation

4.0	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:
4.a	Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.
4.b	Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.
4.c	Use numerical data in describing and comparing objects, events, and measurements.
4.d	Predict the outcome of a simple investigation and compare the result with the prediction.
4.e	Collect data in an investigation and analyze those data to develop a logical conclusion.
4.f	Identify purpose and use basic measurement tools.
4.g	Interpret and draw conclusions from a graph.
Health	
5.0	God created the human body as His temple. As a basis for understanding this concept, students must demonstrate an understanding of the body's functions and proper care:
5.a	<i>Students know</i> basic parts of the body systems.
5.b	<i>Students know</i> the importance of exercise and rest.
5.c	<i>Students know</i> the process of constructing a balanced meal using the food pyramid.
5.d	<i>Students know</i> how diseases are spread, prevented and cured.
5.e	<i>Students know</i> the importance of using precaution and recognizing risks to ensure safety.